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identifying the claim amendments is attached to this Amendment After Final.

Sub C1

1. (Amended) A method of processing a sample to reduce contamination in a nucleic acid analyzer, the method comprising the steps of:

(a) providing a nucleic acid analyzer containing a first sample, wherein the first sample comprises a first nucleic acid that could contaminate a PCR reaction to be performed on a second sample;

(b) contacting a first electrically conductive surface and a second electrically conductive surface to a portion of the first sample;

(c) applying a voltage between the first electrically conductive surface and the second electrically conductive surface; and

(d) adjusting the voltage to reduce the ability of the first nucleic acid in the waste portion of the first sample to be amplified or detected in a PCR reaction process involving the second sample.

2. (Amended) A method of separating a binding pair consisting of a first binding member from a second binding member when the first binding member is bound to the second binding member and in a sample container of an analyzer capable of nucleic acid preparation, amplification, and detection, the

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method comprising the steps of:

- A¹ cont*
- (a) providing the container of the analyzer containing a first binding member bound to a second binding member;
 - (b) introducing a first electrically conductive surface and a second electrically conductive surface into the container;
 - (c) applying a voltage between the first electrically conductive surface and a second electrically conductive surface into the container;
 - (d) adjusting the voltage such that the bond between the first binding member and second binding member is broken.
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Sub C2

4. (Amended) A method of reducing contamination in a reaction vessel used for PCR, the method comprising the steps of:

- A²*
- (a) providing a reaction vessel containing a first sample, wherein the first sample contains a nucleic acid that could contaminate a PCR reaction to be performed on a second sample;
 - (b) locating a first electrode and a second electrode adjacent to the contaminating nucleic acid;
 - (c) applying a voltage between the first electrode and the second electrode; and
 - (d) adjusting the voltage to reduce an ability of the contaminating nucleic acid to be amplified or detected in a PCR reaction.

5. (Amended) A method of separating a binding pair consisting of a first binding member from a second binding member

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A2 cont

when the first binding member is bound to the second binding member and in a sample container of an analyzer capable of nucleic acid preparation, amplification, and detection, the method comprising the steps of:

- B*
- (a) providing the container of the analyzer containing a first binding member bound to a second binding member;
 - (b) locating a first electrode and a second electrode adjacent to the container;
 - (c) applying a voltage between the first electrode and the second electrode; and
 - (d) adjusting the voltage such that the [biological element in the sample is removed from the binding member] bond between the first binding member and second binding member is broken.
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A3

7. (New) The method of claim 1, wherein the first electrically conductive surface is an electrically conductive pipettor.

Sub C3

8. (New) The method of claim 7, further comprising the following steps after step (a) and before step (b):

- (a1) contacting the first sample with a binding member so as to form two portions of the first sample consisting of
 - (i) an analytical portion, wherein the first nucleic acid complex comprises a bond between a portion of the first nucleic acid and the binding member, and
 - (ii) and a waste portion, wherein the waste portion is

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the portion of the first sample that is not bound to the binding member,

(a2) separating the waste portion of the first sample from the analytical portion, and

(a3) aspirating the waste portion of the first sample into the electrically conductive pipettor,

wherein in step (b) the portion of the first sample contacted by the first electrically conductive surface and the second electrically conductive surface is the waste portion of the first sample, and

wherein the reduction in the ability of the first nucleic acid to be amplified or detected in a PCR reaction process is effected by fragmenting the first nucleic acid in the waste portion of the first sample.

9. (New) The method of claim 2, wherein the first binding member is a nucleic acid.

10. (New) The method of claim 9, wherein the second binding member is a magnetic microparticle.

11. (New) The method of claim 10, wherein steps (b) to (d) are performed in a single apparatus.

12. (New) A method of reducing the ability of a nucleic acid to be amplified or detected in a PCR reaction process, the

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method comprising:

- A3*
cont
- (a) providing the nucleic acid in a liquid medium,
 - (b) positioning a portion of the nucleic acid in a liquid medium between two electrodes,
 - (c) applying a voltage between the electrodes sufficient to cause a current to flow through the liquid medium, such that
 - (d) the nucleic acid is fragmented, thereby
 - (e) reducing the ability of the nucleic acid to be amplified or detected in a PCR reaction process.

13. (New) The method of claim 12, wherein the entire method is performed in a nucleic acid analyzer.

- Sub 04*
14. (New) A method of amplifying a nucleic acid, the method comprising:
- (a) providing a nucleic acid in a first liquid medium,
 - (b) binding the nucleic acid to a solid support to form a bound nucleic acid,
 - (c) substantially separating the bound nucleic acid from the first liquid medium,
 - (d) mixing the bound particle with a second liquid medium,
 - (e) positioning a portion of the bound nucleic acid and second liquid medium mixture between two electrodes,
 - (f) applying a voltage between the electrodes sufficient to cause a current to flow through the second liquid medium, such that

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- Sub 3
Cont
- (g) the nucleic acid is eluted from the particle,
(h) adding amplification reagents to the eluted nucleic acid in the second liquid medium sufficient to amplify the nucleic acid thereby forming an amplification mixture, and
(i) maintaining the amplification mixture under suitable conditions to amplify the nucleic acid.

15. (New) The method of claim 14, wherein the particle is a microparticle.

16. (New) The method of claim 14, wherein steps (b) to (i) are performed in a single apparatus.

REMARKS

Examiner Interview

Applicants wish to thank Examiner Sisson for the courtesy extended to their agent, David J. Schodin, during a telephonic interview on May 22, 2001. During the interview, Examiner Sisson and Mr. Schodin discussed the enablement rejection, the form of the claims, and the general state of the prior art. No new prior art was identified during the interview. Examiner Sisson indicated, however, that he would consider the adequacy of the prior art search, and that he would send via facsimile a copy of any relevant references identified, if any, in view of his review of the prior art search. In this regard, Examiner Sisson graciously provided via facsimile a copy of U.S. Patent 6,071,394 to Cheng et al., which therefore, applicants consider to be of record. Mr. Schodin indicated that applicants would file this Preliminary Amendment, which amends the claims to more particularly point